In the Claims:

1. A connection structure for transmission of high frequency signals, comprising a'connector body, which constitutes the outer appearance as well as housing of the connector;

an inner conductor installed in said connector, including a first and a second terminals which are placed to face each other;

a dielectric which insulates said connector body from said inner conductor and determines impedance of said connector;

an extendible pin, which is connected electrically to said second terminal of said inner conductor; and

an impedance compensation means having a hole for said extendible pin, wherein

diameter of said inner conductor remains practically identical between said first and said second terminals, while diameter of said extendible pin is smaller than that of said inner conductor.

2. The connection structure as set forth in Claim 1, wherein

said impedance compensation means compensates electric discontinuities between said inner conductor and said extendible pin by mechanical arraying with a microwave device to be combined with said connection structure.

3. The connection structure as set forth in Claim 1, wherein

said impedance compensation means includes a protrusion part formed in the center thereof to protrude toward a location where said extendible pin is connected.

4. The connection structure as set forth in Claim 3, wherein

said protrusion formed at said impedance compensation means satisfies the conditions, $b \leq a/5$ and $c \leq 2b$, when diameter of said impedance compensation means is a, thickness thereof is b, and size of said protrusion is c.

5. The connection structure as set forth in Claim 3, wherein

a plurality of through holes are formed in the body of said impedance compensation means.

6. The connection structure as set forth in Claim 3, wherein

said impedance compensator is combined with said connector body in a manner that the surface of said impedance compensation means with said protrusion fits to the terminal surface of said connector body.

7. The connection structure as set forth in Claim 1, wherein

said connector body comprises a terminal surface, whereby

said second terminal is formed deeper than said terminal surface.

8. The connection structure as set forth in Claim 1, wherein

said connector body comprises a terminal surface, whereby

said second terminal is formed on the same level as said terminal surface.

9. The connection structure as set forth in Claim 1, wherein

said connector body comprises a terminal surface, whereby

said second terminal is formed to protrude outward from said connector body.

10. The connection structure as set forth in Claim 1, wherein

said extendible pin includes a peak part and an extendible part, the latter having a larger diameter than that of the former, whereby

said extendible part has a diameter suitable to fit into a circular groove formed in said inner conductor of said connector.

11. The connection structure as set forth in Claim 10, wherein

said extendible pin creates a space when it is combined with said circular groove of said inner conductor, whereby

size of said space is adjustable.

12. The connection structure as set forth in Claim 1, wherein

a dielectric ring is combined at a side of said extendible pin opposite to the side where said impedance compensation means is combined.

13. The connection structure as set forth in Claim 1, wherein

said impedance compensation means is made of Teflon.

14. The connection structure as set forth in Claim 5, wherein

said plural through holes are placed at regions between center of said extendible pin insertion hole and locations corresponding to R/2 when the radius of said impedance compensator is R.

15. The connection structure as set forth in Claim 14, wherein

diameter of said through holes are larger than that of said extendible pin.

16. The connection structure as set forth in any one of Claim 1 or Claim 3, wherein

said connection structure is combined with a microwave device, and said microwave device comprises an extendible pin insertion hole formed in a step structure including a first insertion part and a second insertion part, having each a diameter different from one other, whereby

diameter of said first insertion hole is larger than that of said second insertion hole; while diameter of said extendible pin of said connection structure is practically the same as that of said second insertion hole of said microwave device.

17. A coaxial connector used for a connection structure in accordance with any one of Claims 1 through 16.

18. The coaxial connector as set forth in Claim 17, wherein

said coaxial connector is any one of SMA connector, N series connector, TNC connector, BNC connectors, F series and G series connector, DIN connector, OSMP connector, SMB connector, MCX connector, SSMT connector, OSMT connector, MMXC connector, 0.141, 0.250, 0.08563, 0.14, RG316, RG188, ½", and 7/8"right angled connector, semi rigid, or semi flexible coaxial cables.